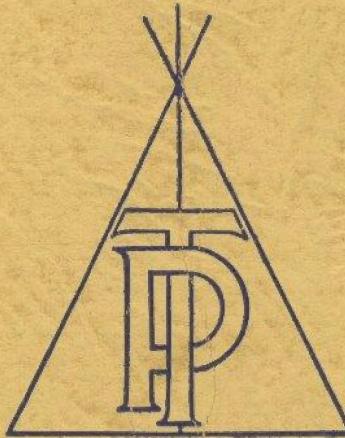


OPERATING INSTRUCTIONS AND  
DESCRIPTION

frequency range from 30 cycles to 15 kilo-  
**for**

VOLUME INDICATOR

Schedule: C.7188  
Contract: 19396.  
Item No: 5.  
Serial No:



Manufactured in Australia by

# TRANSMISSION PRODUCTS PTY. LTD.

## NORTH SYDNEY

OPERATING INSTRUCTIONS AND  
DESCRIPTION

for

VOLUME INDICATOR

Schedule: C.7188  
Contract: 19396.  
Item No: 5.  
Serial No:

HANDBOOK.

VOLUME INDICATOR.

P.M.G. Specification No.  
722A

GENERAL DESCRIPTION:

This instrument is a two stage amplifier employing two 6 AU 6 Valves with the output terminated with a 7500 ohm V.U. Meter which conforms to the requirements set out in P.M.G. Schedule C.7248, with an "A" type scale. It has been designed to fully meet the requirements set out in P.M.G. Specification 722A.

INPUT:- The input impedance is greater than 25,000 ohms over a frequency range from 30 cycles to 15 kilocycles. The instrument can satisfactorily bridge levels from -40 V.U. to +33 V. Access to the input of the instrument is available at both the terminal strip and the jacks on the front panel.

V.U. METER:- The meter is calibrated from -20 V.U. to +3 V.U. in accordance with Schedule C.7248, and the input level is controlled by two attenuators so that the measured output level will lie between -20 V.U. and +3 V.U.

ATTENUATORS:- The first attenuator is a three step "T" type attenuator calibrated -10, 0, +20 V.U. The second attenuator is a ten step potentiometer calibrated from -10 to +10 V.U. in 2 V.U. steps, the combined accuracy of these two attenuators is better than  $\pm 0.2$  V.U. at any setting when measured at 1 Kc/s.

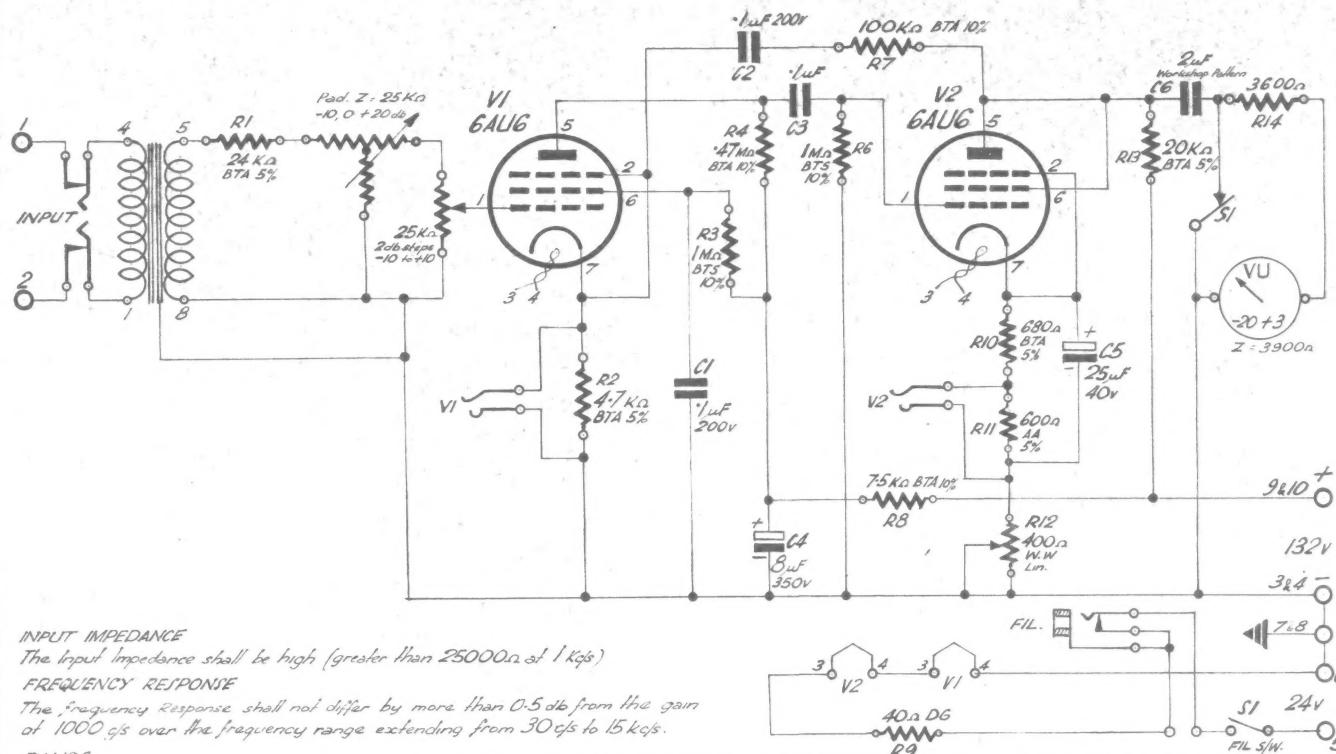
FREQUENCY RESPONSE:- The variation in gain for frequencies ranging from 30 cycles to 15 Kc/s, is less than  $\pm 0.5$  db from the gain measured at 1 Kc/s.

CALIBRATION:- A potentiometer marked "Calibrate", is included in the circuit so that aging of the tubes can be compensated for, and an exact adjustment can be made.

POWER SUPPLY:- This instrument is designed to operate from 132V. D.C. Anode supply, and a 24V D.C/A.C. Filament supply. A filament on/off switch is provided so that the instrument may be switched off when not in use. The off position of this switch provides a protective shunt across the V.U. Meter.

ITEM No.  
REF.

OPERATIONS



**INPUT IMPEDANCE**

The input impedance shall be high (greater than 25000 ohms at 1 kHz).

**FREQUENCY RESPONSE**

The frequency response shall not differ by more than 0.5 dB from the gain of 1000 dB over the frequency range extending from 30 kHz to 15 kHz.

**RANGE**

The operating range shall be 73 V.U. and shall range from -40 V.U. to +33 V.U.

**ACCURACY**

The maximum error at any setting of the attenuator shall not exceed  $\pm 0.2$  dB when measured at 1000 dB.

MATERIAL	DRAWN
QUALITY	TRACED
STOCK SIZE	MECH.
WEIGHT, 1,000	ELECT.
LENGTH, 1,000	
SHETS, 1,000	PASSED
ITEM FINISH	APPROVED
	DATE

TRANSMISSION PRODUCTS PTY. LTD.  
COMMUNICATION ENGINEERS  
DENISON STREET, NORTH SYDNEY, AUSTRALIA

**SCHEMATIC VOLUME INDICATOR**

USED ON PHYSICAL PROGRAMME EQUIP.

THIRD ANGLE PROJECTION — DO NOT SCALE DRAWING — REPORT ERRORS  
SCALE: — UNLESS SPECIFIED TOLERANCE ON FRACTIONS IS:  
" " " DECIMALS IS: —

M09-147-1

1 ORIGINAL  
ISSUE CHANGE  
CHANGES